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09/853,722	05/14/2001	Timothy Russell Klos	P20422	6623

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EXAMINER	
NGUYEN, TOAN D	
ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	09/853,722	KLOS ET AL.	
	Examiner	Art Unit	
	Toan D. Nguyen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03/23/07*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-7, 18-19, and 22-23 are rejected under 35 U.S.C. 103(a) as being obvious over Sundaresan et al. (US 6,463,079) in view of Gidwani (US 6,640,239).

For claim 1, Sundaresan et al. disclose processing orders for high bandwidth connections comprising:

receiving a service order (figure 9, reference step 940) at a provisioning server (figure 10A, reference 1030), the service order requesting implementation of the DSL service, and comprising provisioning data (figure 11, reference steps 1110-1130) (col. 15 lines 55-65 and col. 16 lines 27-34); and

identifying a plurality of facilities (figure 1, references 170-A and 170-B) assigned to implement the service order based on the provisioning data (col. 5 lines 21-30), the plurality of facilities (references 170-A and 170-B) comprising at least a remote terminal connectable to a terminal of the DSL subscriber (col. 15 line 66 to col. 16 line 5, and col. 16 lines 57-67).

However, Sundaresan et al. do not expressly disclose determining an interface corresponding to each of the plurality of assigned facilities, each interface converting at least a portion of the provisioning data into a specific protocol corresponding to the assigned facility; and

configuring each of the plurality of facilities, using the corresponding interface, to implement the service order based on the provision data.

In an analogous art, Gidwani discloses determining an interface corresponding to each of the plurality of assigned facilities, each interface converting at least a portion of the provisioning data into a specific protocol corresponding to the assigned facility (figure 2A, col. 24 lines 4-36, and col. 27 line 62 to col. 28 line 7); and

configuring each of the plurality of facilities, using the corresponding interface, to implement the service order based on the provision data (figure 2A, col. 24 lines 4-36).

One skilled in the art would have recognized the determining an interface corresponding to each of the plurality of assigned facilities, each interface converting at least a portion of the provisioning data into a specific protocol corresponding to the assigned facility, and would have applied Gidwani's UIP server in Sundaresan et al.'s service order. Therefore, it would have been obvious to one of ordinary skill in the art at

the time of the invention, to use Gidwani's apparatus and method for intelligent scalable switching network in Sundaresan et al.'s processing orders for high bandwidth connections with the motivation being to provide the scalable intelligent multimedia network (col. 23 line 66-67).

For claim 2, Sundaresan et al. disclose determining at least one path interconnecting the plurality of facilities and a subscriber port of the remote terminal, the subscriber port being configured to connect with the DSL subscriber terminal (figure 19, col. 29 lines 3-19).

For claim 3, Sundaresan et al. disclose determining and implementing a cross-connection in at least one of the plurality of facilities to enable the at least one path interconnecting the plurality of facilities and the subscriber port (figure 19, col. 29 lines 3-19).

For claim 4, Sundaresan et al. disclose storing configuration data in a system database, the configuration data comprising data identifying the plurality of facilities assigned to implement the service order, the at least one path interconnecting the plurality of facilities and the subscriber port of the remote terminal, and the cross-connection in the at least one of the plurality of facilities (figure 19, col. 29 lines 3-19).

For claim 5, Sundaresan et al. disclose wherein the provisioning data is derived based on the provisioning data indication in the service order (col. 2 lines 35-47).

For claim 6, Sundaresan et al. disclose wherein the service order indicates the provisioning data by at least one of providing the provisioning data and providing a

profile identification that corresponds to parameters that define the DSL service (figure 9, col. 15 lines 55-65).

For claim 7, Sundaresan et al. disclose determining whether the service order comprises erroneous data; and when the service order is determined to comprise erroneous data, displaying at a graphical user interface an error message, which identifies the erroneous data, and receiving input from the graphical user interface to correct the erroneous data (figures 15 and 16, col. 23 lines 1-9 and col. 23 line 26 to col. 24 line 55).

For claim 18, Sundaresan et al. disclose processing orders for high bandwidth connections comprising:

a server (figure 10A, reference 1030) configured to receive a service order (figure 9, reference step 940) for implementing the DSL service (col. 15 lines 55-65 and col. 16 lines 27-34);

a plurality of network facilities (figure 1, references 170-A and 170-B) connectable to the server (col. 5 lines 21-30); and

a system database configured to store the service order (figure 7A, col. 20 lines 34-35); and wherein the provisioning server is further configured to determine provisioning facilities, from among the plurality of network facilities, assigns to implement the service order (col. 5 lines 21-30), the provisioning facilities comprising at least one remote terminal, connectable to a terminal of a subscriber of the DSL service (col. 15 line 66 to col. 16 line 5 and col. 16 lines 57-67).

However, Sundaresan et al. do not expressly disclose a plurality of interfaces identifiers for interfaces corresponding to the plurality of network facilities; and

wherein the provisioning server is further configured to direct configuration of each of the provisioning facilities, using at least one of the interface identifiers retrieved from the system database corresponding to each of the provisioning facilities, enabling communication with the provisioning facilities, to implement the DSL service based on the service order.

In an analogous art, Gidwani discloses a plurality of interfaces identifiers for interfaces corresponding to the plurality of network facilities (figure 2A, col. 24 lines 4-36, and col. 27 line 62 to col. 28 line 7); and

wherein the server is further configured to direct configuration of each of the provisioning facilities, using at least one of the interface identifiers retrieved from the system database corresponding to each of the provisioning facilities, enabling communication with the provisioning facilities, to implement the DSL service based on the service order (figure 2A, col. 24 lines 4-36).

One skilled in the art would have recognized the plurality of interfaces identifiers for interfaces corresponding to the plurality of network facilities, and would have applied Gidwani's UIP server in Sundaresan et al.'s service order. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Gidwani's apparatus and method for intelligent scalable switching network in Sundaresan et al.'s processing orders for high bandwidth connections with the

motivation being to provide the scalable intelligent multimedia network (col. 23 line 66-67).

For claim 19, Sundaresan et al. disclose the remote terminal comprising a subscriber port, the subscriber port being configured to connect with a DSL subscriber terminal, wherein the server enables at least one path interconnecting the plurality of facilities and the subscriber port of the remote terminal (figure 19, col. 29 lines 3-19).

For claim 22, Sundaresan et al. disclose a graphical user interface connected to the server and configured to interface with the server, the system database and at least one of the plurality of network elements (figure 5, col. 8 lines 5-26).

For claim 23, Sundaresan et al. disclose when the service order comprises erroneous data, the graphical user interface displays an error message, which identifies the erroneous data, and receives input from an operator in response to the erroneous data (figures 15 and 16, col. 23 lines 1-9 and col. 23 line 26 to col. 24 line 55).

4. Claims 8-17, 20-21, and 24-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundaresan et al. (US 6,463,079) in view of Gidwani (US 6,640,239). further in view of Byers (US 5,926,472).

For claims 8, 12-14, 20, and 27-29, Sundaresan et al. disclose processing orders for high bandwidth connections comprising:

receiving a service order (figure 9, reference step 940) at a common server (figure 10A, reference 1030), requesting set up of the DSL service (col. 15 lines 55-65 and col. 16 lines 27-34);

converting the service order into provisionable steps (col. 16 lines 27-67 and col. 18 lines 1-24);

determining facility assignment data related to each of a plurality of facilities needed to implement the provisionable steps (col. 5 lines 21-30), the facility assignment data comprising identification of at least a remote terminal and a subscriber port, connectable to a terminal of the DSL subscriber (figure 19, col. 29 lines 3-19); and

configuring each of the plurality of facilities to implement the service order based on instructions communicated from the common server to each of the plurality of facilities using the corresponding interface (col. 18 lines 32-62).

However, Sundaresan et al. do not expressly disclose determining an interface for each of the plurality of facilities, each interface enabling communication with the corresponding one of the plurality of facilities; and

configuring each of the plurality of facilities to implement the service order based on instructions communicated from the common server to each of the plurality of facilities using the corresponding interface.

In an analogous art, Gidwani discloses determining an interface for each of the plurality of facilities, each interface enabling communication with the corresponding one of the plurality of facilities (figure 2A, col. 24 lines 4-36); and

configuring each of the plurality of facilities to implement the service order based on instructions communicated from the common server to each of the plurality of facilities using the corresponding interface (figure 2A, col. 24 lines 4-36).

One skilled in the art would have recognized the determining an interface for each of the plurality of facilities, each interface enabling communication with the corresponding one of the plurality of facilities, and would have applied Gidwani's UIP server in Sundaresan et al.'s service order. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Gidwani's apparatus and method for intelligent scalable switching network in Sundaresan et al.'s processing orders for high bandwidth connections with the motivation being to provide the scalable intelligent multimedia network (col. 23 line 66-67).

Furthermore, Sundaresan et al. in view of Gidwani do not expressly disclose an optical concentrator device connectable to the remote terminal. In an analogous art, Byers discloses an optical concentrator device connectable to the remote terminal (col. 1 lines 43-45).

Sundaresan et al. in view of Gidwani and Byers further disclose the configuring each of the plurality of facilities to implement the service order comprising one of building, deleting or changing at least one virtual path over an optical fiber connection between the remote terminal and the optical concentrator device (col. 29 lines 54-60 as set forth in claims 12 and 27); providing a network side port at the remote terminal configured to connect with the subscriber port; communicating to the optical concentrator device the identity of the network-side port; and configuring the optical concentrator device to support the virtual path to the network-side port of the remote terminal (figure 19, col. 28 line 66 to col. 29 line 39 as set forth in claims 13-14 and 28-29); wherein the at least one of the remote terminal and the optical concentrator

device determine and implement a cross-connection to enable the at least one path interconnecting the plurality of facilities and the subscriber port (figure 19, col. 28 line 66 to col. 29 line 39 as set forth in claim 20).

One skilled in the art would have recognized the optical concentrator device connectable to the remote terminal to use the teaching of Byers in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention, to use the optical concentrator device connectable to the remote terminal as taught by Byers in Sundaresan et al. with the motivation being to provide less expensive loops than copper loops by converting switch interfaces to fiber and back to copper at the remote terminal and consist of an optical remote terminal that interfaces with the optical links from the switching system (col. 1 lines 4852).

For claim 9, Sundaresan et al. disclose formatting data from the service order into a common internal format prior to converting the service order into provisional steps (col. 18 lines 49-53).

For claim 10, Sundaresan et al. disclose validating an intent of the service order with respect to a state of a port of the remote terminal associated with the DSL subscriber and provisioning the service order in the remote terminal upon successful validation (figure 19, col. 28 line 66 to col. 29 line 46).

For claim 11, Sundaresan et al. disclose identifying errors related to at least one of the service order and the provisioning of the DSL service; and displaying information regarding the errors at a graphical user interface, the graphical user interface being

configured to enable a user to analyze and respond to the errors (figures 15 and 16, col. 23 lines 1-9 and col. 23 line 26 to col. 24 line 55).

For claim 15, Sundaresan et al. disclose the configuring each of the plurality of facilities to implement the service order comprising one of building, deleting or changing at least one cross-connection in at least one of the plurality of facilities (col. 20 lines 34-35).

For claim 16, Sundaresan et al. disclose enqueuing the provisionable steps after determining the facility assignment data related to each of a plurality of facilities needed to implement the provisionable steps; and sequentially dequeuing the provisionable steps for implementation on a scheduled provisioning date, prior to determining the interface for each of the plurality of facilities (col. 20 lines 26-49). .

For claim 17, Sundaresan et al. disclose receiving service profile data related to at least one service from a service provider, the service profile data comprising at least one parameter related to the service order; storing the service profile data in a system database; and configuring each of the plurality of facilities to implement the service order additionally based on the service profile data (col. 19 lines 14-51 and col. 20 lines 26-35).

For claim 21, Sundaresan et al. disclose the system database comprising configuration data that identifies the plurality of facilities assigned to implement the service order, the at least one path interconnecting the plurality of facilities and the subscriber port of the remote terminal, and the cross-connection in the at least one of the plurality of facilities (col. 20 lines 34-35).

For claims 24 and 30, Sundaresan et al, disclose processing orders for high bandwidth connections comprising:

a service order entry system configured to receive a service order for the DSL service from a DSL service provider (figure 9, reference step 940) (col. 5 lines 46-65, col. 15 lines 55-65 and col. 16 lines 27-34);

a server (figure 10A, reference 1030) configured to receive the service order from the service order entry system (col. 16 lines 27-34);

a plurality of network facilities (figure 1, references 170-A and 170-B) connectable to the server (figure 10A, reference 1030) and a terminal of a subscriber of the DSL service (figure 1, references 110-A and 110-B) (col. 29 lines 3-19);

a facility inventory system connected to the server (figure 10A, reference 1030) and configured to store facility information regarding each of a plurality of network facilities, the facility information comprising a type, a location and an availability of each of the plurality of network facilities (figure 7A, col. 9 lines 45-60, and col. 9 line 54 to col. 10 line 22); and

a system database connected to a server (figure 10A, reference 1030) and configured to store data relating to the service (figure 7A, col. 9 lines 45-60, and col. 20 lines 34-35); and

wherein the server (figure 10A, reference 1030) is further configured to communicate with the facility inventory system to determine provisioning facilities from among the plurality of network facilities needed to implement the DSL service based on

order (col. 19 lines 9-46 and col. 20 lines 26-35), the provisioning facilities comprising at leas one remote terminal having a subscriber port (figure 19, col. 29 lines 3-19).

However, Sundaresan et al. do not expressly disclose a plurality of interfaces corresponding to the plurality of network facilities, the plurality of interfaces enabling communication with the plurality of network facilities; and

wherein the server is further configured to implement configuration of each of the provisioning facilities using a corresponding one of the plurality of interfaces retrieved from the system database to implement the DSL service.

In an analogous art, Gidwani discloses a plurality of interfaces corresponding to the plurality of network facilities, the plurality of interfaces enabling communication with the plurality of network facilities (figure 2A, col. 24 lines 4-36); and

wherein the server is further configured to implement configuration of each of the provisioning facilities using a corresponding one of the plurality of interfaces retrieved from the system database to implement the DSL service (figure 2A, col. 24 lines 4-36).

One skilled in the art would have recognized the plurality of interfaces corresponding to the plurality of network facilities, the plurality of interfaces enabling communication with the plurality of network facilities, and would have applied Gidwani's UIP server in Sundaresan et al.'s service order. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Gidwani's apparatus and method for intelligent scalable switching network in Sundaresan et al.'s processing orders for high bandwidth connections with the motivation being to provide the scalable intelligent multimedia network (col. 23 line 66-67).

Furthermore, Sundaresan et al. in view of Gidwani's do not expressly disclose at least one optical concentrator device, the remote terminal being connectable to the optical concentrator device via an optical fiber line. In an analogous art, Byers discloses at least one optical concentrator device, the remote terminal being connectable to the optical concentrator device via an optical fiber line (col. 1 lines 43-45).

One skilled in the art would have recognized the optical concentrator device connectable to the remote terminal to use the teaching of Byers in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention, to use the optical concentrator device connectable to the remote terminal as taught by Byers in Sundaresan et al. with the motivation being to provide less expensive loops than copper loops by converting switch interfaces to fiber and back to copper at the remote terminal and consist of an optical remote terminal that interfaces with the optical links from the switching system (col. 1 lines 48-52).

For claim 25, Sundaresan et al. disclose wherein the server is connectable to a graphical user interface to enable interaction by a network operator with at least one of the server, the plurality of network facilities and the system database (figure 5, col. 8 lines 5-26).

For claim 26, Sundaresan et al. disclose wherein the server is further configured ti identify errors related to at least one of the service order and the provisioning of the DSL service; and wherein information regarding the errors is displayed at the graphical user interface and error responses are sent from the graphical user interface to the server (figures 15 and 16, col. 23 lines 1-9, and col. 23 line 26 to col. 24 line 55).

For claim 31, Sundaresan et al. disclose processing orders for high bandwidth connections comprising:

a receiving source code segment that receives a service order requesting the DSL service (figure 9, cot. 15 lines 55-65 and col. 16 lines 27-34);

an assigning source code segment that assigns a plurality of facilities needed to implement the service order based on provisioning data indicated by the service order (col. 5 lines 21-30), the plurality of facilities comprising at least a remote terminal connectable t a terminal of a DSL subscriber (col. 15 line 66 to col. 16 line 5 and col. 16 lines 57-67).

Sundaresan et al. do not expressly disclose a determining source code segment that determines an interface corresponding to each of the plurality of facilities, each interface converting the service order data into a specific protocol corresponding to the assigned facility; and

a configuring source code segment that configures each of the plurality of facilities, using the corresponding interface, to implement the service order based on instructions from a provisioning server.

In an analogous art, Gidwani discloses a determining source code segment that determines an interface corresponding to each of the plurality of facilities, each interface converting the service order data into a specific protocol corresponding to the assigned facility (figure 2A, col. 24 lines 4-36, and col. 27 line 62 to col. 28 line 7); and

a configuring source code segment that configures each of the plurality of facilities, using the corresponding interface, to implement the service order based on instructions from a provisioning server (figure 2A, col. 24 lines 4-36).

One skilled in the art would have recognized the determining source code segment that determines an interface corresponding to each of the plurality of facilities, each interface converting the service order data into a specific protocol corresponding to the assigned facility, and would have applied Gidwani's UIP server in Sundaresan et al.'s service order. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Gidwani's apparatus and method for intelligent scalable switching network in Sundaresan et al.'s processing orders for high bandwidth connections with the motivation being to provide the scalable intelligent multimedia network (col. 23 line 66-67).

Furthermore, Sundaresan et al. in view of Gidwani do not expressly disclose an optical concentrator device connectable to the remote terminal. In an analogous art, Byers discloses an optical concentrator device connectable to the remote terminal (col. 1 lines 43-45).

One skilled in the art would have recognized the optical concentrator device connectable to the remote terminal to use the teaching of Byers in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention, to use the optical concentrator device connectable to the remote terminal as taught by Byers in Sundaresan et al. with the motivation being to provide less expensive loops than copper loops by converting switch interfaces to fiber

and back to copper at the remote terminal and consist of an optical remote terminal that interfaces with the optical links from the switching system (col. 1 lines 4852).

For claim 32, Sundaresan et al. disclose a path determining source code segment that determines at least one path interconnecting the plurality of facilities and a subscriber port of the remote terminal, the subscriber port being configured to connect with the DSL subscriber terminal (figure 19, col. 29 lines 3-19).

For claim 33, Sundaresan et al. disclose a cross-section determining source code segment that determines and implements a cross-connection in at least one of the plurality of facilities to enable the at least one path interconnecting the plurality of facilities and the subscriber port (figure 19, col. 29 lines 3-19).

For claim 34, Sundaresan et al. disclose a memory source code segment that stores configuration data in a system database, the configuration data comprising data identifying the plurality of facilities assigned to implement the service order, the at least one path interconnecting the plurality of facilities and the subscriber port of the remote terminal, and the cross-connection in the at least one of the plurality of facilities (figure 19, col. 29 lines 3-19).

For claim 35, Sundaresan et al. disclose wherein the provisioning data is derived based on the provisioning data indication in the service order (col. 2 lines 35-47).

For claim 36, Sundaresan et al. disclose wherein the service order indicates the provisioning data by at least one of providing the provisioning data and providing a profile identification that corresponds to parameters that define the DSL service (figure 9, col. 15 lines 55-65).

For claim 37, Sundaresan et al. disclose an error detection source code segment that determines whether the service order comprises erroneous data and, when the service order is determined to comprise erroneous data, initiates display at a graphical user interface of an error message, which identifies the erroneous data, and receives input from the graphical user interface to correct the erroneous data (figures 15 and 16, col. 23 lines 1-9 and col. 23 line 26 to col. 24 line 55).

For claim 38, Sundaresan et al. disclose processing orders for high bandwidth connections comprising:

a receiving source code segment that receives a service order at a common server via a service order entry system, the service order corresponding to a DSL subscriber (figure 9, col. 15 lines 55-65 and col. 16 lines 27-34);

a converting source code segment that converts the service order into provisional steps (cot. 16 lines 27-67 and col. 18 lines 1-24); and

a facility assignment source code segment that determines facility assignment data related to each of a plurality of facilities needed to implement the provisionable steps (cot. 5 lines 2130), the facility assignment data comprising identification of at least a remote terminal and a subscriber port, connectable to a terminal of the DSL subscriber, a an optical concentrator device connectable to the remote terminal (figure 19, col. 29 lines 3-19).

However, Sundaresan et al. do not expressly disclose an interface determining source code segment that determining an interface for each of the plurality of facilities,

each interface enabling communication with the corresponding one of the plurality of facilities; and

a configuring each of the plurality of facilities to implement the service order based on instructions communicated from the common server to each of the plurality of facilities using the corresponding interface.

In an analogous art, Gidwani discloses an interface determining source code segment that determining an interface for each of the plurality of facilities, each interface enabling communication with the corresponding one of the plurality of facilities (figure 2A, col. 24 lines 4-36); and

a configuring each of the plurality of facilities to implement the service order based on instructions communicated from the common server to each of the plurality of facilities using the corresponding interface (figure 2A, col. 24 lines 4-36).

One skilled in the art would have recognized the interface determining source code segment that determining an interface for each of the plurality of facilities, each interface enabling communication with the corresponding one of the plurality of facilities, and would have applied Gidwani's UIP server in Sundaresan et al.'s service order. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Gidwani's apparatus and method for intelligent scalable switching network in Sundaresan et al.'s processing orders for high bandwidth connections with the motivation being to provide the scalable intelligent multimedia network (col. 23 line 66-67).

Furthermore, Sundaresan et al. in view of Gidwani do not disclose an optical concentrator device connectable to the remote terminal. In an analogous art, Byers discloses an optical concentrator device connectable to the remote terminal (col. 1 tines 43-45).

One skilled in the art would have recognized the optical concentrator device connectable to the remote terminal to use the teaching of Byers in the system of Sundaresan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention, to use the optical concentrator device connectable to the remote terminal as taught by Byers in Sundaresan et al. with the motivation being to provide less expensive loops than copper loops by converting switch interfaces to fiber and back to copper at the remote terminal and consist of an optical remote terminal that interfaces with the optical links from the switching system (col. 1 lines 48-52).

Response to Arguments

5. Applicant's arguments filed 03/23/07 have been fully considered but they are not persuasive.

The applicant argues with respect to claims 1, 18 and 31 on page 16, second paragraph, that Sundaresan et al. do not include a provisioning server since they do not actual provisioning, but rather teach pre-qualifying service orders that are later provisioned. The examiner disagrees. Applicant's attention is directed to Sundaresan et al. at col. 15 lines 55-65 (see figure 9), where Sundaresan et al. teach: "In step 910, a requestor enters into a computer system the information identifying a user location and the desired services." Sundaresan et al. teach further at col. 16 lines 10-18: "The

desired services which need to be specified include the type of DSL technology which is to be provided on the corresponding local loop. As is well known in the relevant arts, different DSL technologies provide different speeds. For example, IDSL typical allows only 128Kbps or 144 Kbps bandwidth depending on the implementation, while on ADSL implementation can support bandwidth of 6.1Mbps in the direction leaving the central office and 640Kbps in the reverse direction (provisioning server means)."

On page 17, first paragraph, the applicant argues with respect to claims 8 and 38, that there is no teaching or suggestion of going a step further and provisioning the services, and certainly no teaching or suggestion of how to actually provision services, i.e., by converting the service order into provisionable step, as recited in claim 8 and 38. The examiner disagrees. At col. 18 lines 1-5, Sundaresan et al. teach: "OSS 190 receives from server system 1030 information identifying the user location, desired services, and the date from which the services are desired. OSS 190 then processes the received information to determine whether the requested service can be provided (converting the service order into provisionable step means).

On page 17 second paragraph, the applicant argues with respect to claim 24, that the server 1030 clearly does not teach the facility inventory system with the server of claim 24 communicates to determine the provisioning facilities from the plurality of network facilities needed to implement the DSL service based on the service order. The examiner disagrees. Sundaresan et al. teach at col. 9 line 54 to col. 10 line 22 (see figure 7A): "...display screen 700 is shown with three groups (folders) – Queues 710, filters 730, and search results 740 (determine the provisioning facilities from the plurality

of network facilities needed to implement the DSL service based on the service order means)."

The applicant argues on page 18, second paragraph that Gidwani does not teach or suggest determining an interface corresponding to each assigned facility for the purpose of provisioning a DSL server. The examiner disagrees. Gidwani teaches at col. 7 lines 9-10, "The present invention incorporates a means for enabling dynamic provisioning from the customer premises. In one embodiment of the present invention the subscriber is able to configure the performance of his services directly from the subscriber side to the service provider server (determining an interface corresponding to each assigned facility for the purpose of provisioning a DSL server means)." The motivation to combine Gidwani's teachings of UIP server in Sundaresan et al. would be to provide multiline capability, and a unified Intenret portal client (UIP client) incorporating functionality of a Customer Premise Equipment (CPE) DSL modem for Sundaresan et al.'s network facilities.

Furthermore, the applicant argues with respect to claims 2-7, 9-17, 19-23, 25-30, and 32-37, that they are allowable at least because they depend from independent claims 1, 8, 18, 24 and 31, respectively. The examiner disagrees. The independent claims 1, 8, 18, 24 and 31 are rejected, therefore, the dependent claims 2-7, 9-17, 19-23, 25-30, and 32-37 are also rejected.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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TN

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